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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,577	01/23/2002	Robert J. McMorrow	Analog 6432	6111
7590 05/14/2004			EXAMINER	
Samuels, Gauthier & Stevens LLP Suite 3300 225 Franklin Street Boston, MA 02110			TRINH, SONNY	
			ART UNIT	PAPER NUMBER
			2685	

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/055,577

Applicant(s)

MCMORROW ET AL

Examiner

Sonny TRINH

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 11, 12, 22 and 23 is/are rejected.
- 7) ☒ Claim(s) 2-10, 13-21 and 24-31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4.6</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. **Claims 29, 31, and 32** are objected to because of the following informalities:  
**Claim 29** should depend on claim 28, not 21. For the purpose of examining, it is assumed that claim 29 depends on claim 28. Appropriate correction is required.  
**Claim 31** should depend on claim 30, not 19. For the purpose of examining, it is assumed that claim 31 depends on claim 30. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claim 32** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In this case, claim 32 should be divided into claims 32 and 33 (typographical error on line 13). New claim 33 should start with a new paragraph. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1, 11-12, 22-23** are rejected under 35 U.S.C. 102(b) as being anticipated by Miyake ("Miyake"; U.S. Patent Number 5,408,197).

Regarding **claim 1**, with reference to figure 13 and its description, Miyake discloses a power detector/controller for wireless handsets that use a modulation scheme having a non-constant amplitude envelope ("fluctuation", abstract, figure 13), the power detector/controller comprising:

a power amplifier (figure 13, power amplifier 2) having an input to receive a input signal with non-constant amplitude envelope and an output to output an amplified input signal, wherein either output power or gain of the power amplifier is controlled by a power amplifier control signal (12);

an output demodulating detector (5) coupled to the output of the power amplifier (4) to generate a feedback signal proportional to the amplified input signal's power, the feedback signal including an AM variation due to the non-constant amplitude envelope (column 1 line 15 to columns 8-9);

a summing junction (62) to receive the feedback signal, a ramp control signal that indicates either a target gain or target output power of the power amplifier, and an AM

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variation signal that represents the AM variation in the power of the input signal due to the non-constant amplitude envelope; and the summing junction combining the feedback signal, the ramp control signal and AM variation signal to produce the power amplifier control signal such that the power amplifier control signal substantially free of any AM variation due to the non-constant envelope (column 9 line 6-25).

Regarding **claims 12 and 23**, these two claims specify the wireless handset and RF power amplifier module as opposed to the power detector controller for the wireless handset of claim 1 and are therefore rejected for the same reasons.

Regarding **claims 11, 22**, Miyake further teaches that the wireless handsets also use a modulation scheme having a constant amplitude envelope ("QPSK", column 1, 3).

#### ***Allowable Subject Matter***

4. **Claims 2-10, 13-21, and 24-31** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding **claim 2**, the prior art provided numerous examples of power detector/controller for use in the wireless handsets, but failed to disclose or fairly suggest the specific combination of structural and functional limitations set forth in claim 2, specifically, the power detector/controller for wireless handsets that use a modulation scheme having a non-constant amplitude envelope, as specified in claim 1, further comprising an input demodulating detector coupled to the input of the power amplifier to generate the AM variation signal received by the summing junction.

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Regarding **claim 13**, the prior art provided numerous examples of wireless handset for a mobile communication system that uses a modulation scheme having a non-constant amplitude envelope, but failed to disclose or fairly suggest the specific combination of structural and functional limitations set forth in claim 13, specifically, the power detector/controller for wireless handsets that use a modulation scheme having a non-constant amplitude envelope, as specified in claim 12, further comprising an input demodulating detector coupled to the input of the power amplifier to generate the AM variation signal received by the summing junction.

Regarding **claim 24**, the prior art provided numerous examples of RF power amplifier module for signals having a modulation scheme with a non-constant amplitude envelope, but failed to disclose or fairly suggest the specific combination of structural and functional limitations set forth in claim 24, specifically, the power detector/controller for wireless handsets that use a modulation scheme having a non-constant amplitude envelope, as specified in claim 23, further comprising an input demodulating detector coupled to the input of the power amplifier to generate the AM variation signal received by the summing junction.

## **Conclusion**

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9306, (for formal communications intended for entry, for informal or draft communications, please label "PROPOSED" or "DRAFT")

*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, 6<sup>th</sup> Floor (Receptionist).*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonny TRINH whose telephone number is 703-305-1961. The examiner can normally be reached on Monday-Thursday and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed URBAN can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**SONNY TRINH**  
**PRIMARY EXAMINER**

5/11/04